

SUMMARY OF SAFETY AND EFFECTIVENESS

SPONSOR: Biomet, Inc.
P.O. Box 587
Airport Industrial Park
Warsaw, Indiana 46581-0587

CONTACT PERSON: Michelle L. McKinley

DEVICE NAME: M2a™ 32mm Taper System

CLASSIFICATION NAME: Prosthesis, Hip, Semi-constrained (Metal
Uncemented Acetabular Component)

INTENDED USE:

The M2a™ 32mm Taper System is indicated for use in patients requiring total hip replacement due to the following:

- a.) Non-inflammatory degenerative joint disease including avascular necrosis, diastrophic variant, fracture of the pelvis, fused hip, leg perthes, osteoarthritis, slipped capital epiphysis, subcapital fractures, and traumatic arthritis
- b.) Rheumatoid arthritis
- c.) Correction of functional deformity
- d.) Treatment of non-union, femoral neck fracture, and trochanteric fractures of the proximal femur with head involvement, unmanageable using other techniques.
- e.) Revision of previously failed total hip arthroplasty.

DEVICE DESCRIPTION:

The M2a™ 32mm Tapered System consists of a titanium outer shell with a cobalt chromium metallic liner, which articulates with a cobalt chromium modular head.

Acetabular Shell

The acetabular shells that will initially be available in two designs, the Mallory Head® Radial and the Universal® Acetabular Component. Both designs are modular two-piece systems consisting of a modular cobalt chromium (Co-Cr-Mo) liner and a porous coated titanium shell. Hemispherical shape of both outer shells closely matches the natural acetabulum, which leads to minimal bone removal in preparation for implantation. The two acetabular shell designs are available with holes or as a solid dome. If necessary, the shell with holes allows the use of 6.5 mm dome for optional supplemental fixation. The solid shell configuration without dome holes increases the surface area of the porous

plasma spray coating. The Mallory Head acetabular shell features eight fins, which aid in preventing rotation.

The outer surface of the shell is covered with a porous coating of titanium alloy (Ti-6Al-4V) powder, which ensures immediate component fixation and maximum bone-to-implant contact. The plasma sprayed surface consists of particles which are bonded together to form a random pattern with interconnecting pores.

Acetabular Liner

The metallic cobalt chromium bearing liner fits into the outer shell by means of a taper similar to the taper used for the attachment of the modular head. The liner locks with the acetabular shell using a taper mechanism.

Modular Femoral Head

The M2a™ 32mm Tapered System utilizes a 32mm cobalt chromium (Co-Cr-Mo) modular femoral head with seven neck lengths (-6mm to +12mm). Each modular head has a four degree included angle in the bore.

The modular heads may be used in conjunction with any of Biomet's commercially available Type I taper femoral components. At the time of surgery, the modular head is assembled with a femoral stem.

POTENTIAL RISKS:

The potential risks associated with this device are the same as with any joint replacement device. These include, but are not limited to:

Fracture of the component	Bone fracture
Cardiovascular disorders	Hematoma
Implant loosening/migration	Blood vessel damage
Soft tissue imbalance	Nerve damage
Deformity of the joint	Excessive wear
Tissue growth failure	Infection
Delayed wound healing	Dislocation
Metal sensitivity	Breakdown of the porous surface



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

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Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

Ms. Michelle L. McKinley
Regulatory Specialist
Biomet, Inc.
P.O.Box 587
Warsaw, Indiana 46582

Re: K003363
Trade Name: M2A 32 MM Taper System
Regulatory Class: III
Product Code: KWA
Dated: December 6, 2000
Received: December 7, 2000

Dear Ms. McKinley:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general control provisions of the Act. The general control provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

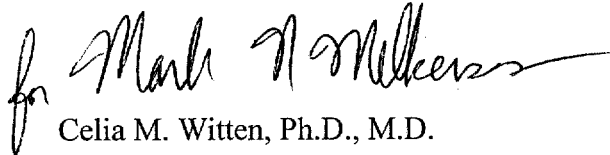
If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the current Good Manufacturing Practice requirement, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic (QS) inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

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If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or at (301) 443-6597, or at its Internet address "<http://www.fda.gov/cdrh/dsmamain.html>".

Sincerely yours,

A handwritten signature in black ink, appearing to read "for Mark A. Witten", is written over the typed name.

Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative and

Neurological Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

510(k) Number (if known): K003363

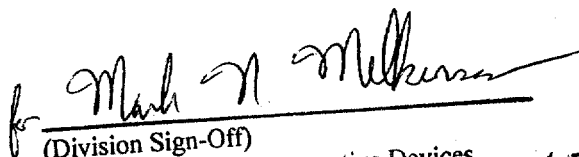
Device Name: M2a™ 32mm Taper System

Indications for Use:

The M2a™ 32mm Taper System is indicated for use in patients requiring total hip replacement due to the following:

1) Non-inflammatory degenerative joint disease including osteoarthritis and avascular necrosis; 2) rheumatoid arthritis; 3) correction of functional deformity; 4) revision procedures where other treatment or devices have failed; 5) treatment of non-union, femoral neck fracture, and trochanteric fractures of the proximal femur with head involvement, unmanageable using other techniques.

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(Division Sign-Off)
Division of General Restorative Devices
510(k) Number K003363

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